

REMARKS

The Final Office Action dated July 6, 2010 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-41 are currently pending in the application. Applicants thank the Examiner for the allowance of claims 19-21, 29-34, and 36-38. Claims 39-41 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added and no new issues are raised which require further consideration or search. Therefore, claims 1-18, 22-28, 35, and 39-41 are respectfully submitted for consideration.

Allowable Subject Matter

The Examiner indicated that claims 19-21, 29-34, and 36-38 are allowed. Applicants thank the Examiner for the allowance of claims 19-21, 29-34, and 36-38. As will be discussed in more detail, Applicants respectfully submit that claims 1-18, 22-28, 35, and 39-41 also recite allowable subject matter, and it is respectfully requested that claims 1-18, 22-28, 35, and 39-41 be allowed as well.

Claim Rejections Under 35 U.S.C. § 101

The Office Action rejected claims 39-41 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Specifically, the Office Action indicated that claims 39-41 are interpreted to be computer programs representing computer listing per se because paragraph 0092 of the specification allegedly states that the invention is implemented in software (see Office Action at pages 3-4). In the “Response to Remarks” section, the Office Action alleged that the specification fails to describe or limit the meaning “a computer-readable medium encoded with a computer program,” and alleged that it is well known in the art that electromagnetic signals, which are not statutory subject matter, are a type of computer-readable medium capable of being encoded with instructions. The Office Action further suggested that claims 39-41 be amended to clarify that the computer-readable medium is non-transitory (see Office Action at pages 2-3).

Applicants respectfully disagree with the Office Action’s position that claims 39-41 recite non-statutory subject matter. Nevertheless, claims 39-41 have been amended to clarify that the computer-readable medium is non-transitory, in accordance with the Office Action’s suggestion. Applicants respectfully submit that the amendments to claims 39-41 moot the rejection, and accordingly, Applicants request that the rejection be withdrawn.

Claim Rejections Under 35 U.S.C. § 112

The Office Action rejected claims 39-41 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement (i.e. allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention). Specifically, the Office Action alleged that a computer program product embodied on a computer-readable medium was not disclosed in the specification (see Office Action at page 4).

In the “Response to Arguments” section, the Office Action further indicated that Applicants’ arguments traversing this rejection, presented in Applicants’ Response dated September 25, 2009 (“Previous Response”) were not persuasive (see Office Action at page 2). However, in the “Response to Remarks” section, the Office Action only addressed Applicants’ arguments with respect to the rejection under 35 U.S.C. § 101, and the rejection under 35 U.S.C. § 103, and failed to address Applicants’ arguments with respect to the rejection under 35 U.S.C. § 112 at all (see Office Action at page 2-3). A call to the Examiner was made, and the Examiner indicated that he meant to withdraw this rejection, and replace it with an objection to the specification under 37 CFR 1.75(d)(1), because the specification fails to use the term “computer-readable medium,” and that claims 39-41 each recite both a “computer-readable medium” and a processor. This rejection/objection is respectfully traversed for at least the following reasons.

As argued in the Previous Response, adequate written description under 35 U.S.C. § 112, first paragraph, does not require literal support for the claimed invention. Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an applicant had possession of the concept of what is claimed. *See Ex parte Parks*, 30 USPQ2d 1234 (B.P.A.I. 1994); *see also Ralston Purina Co. v. Far-Mar-Co, Inc.*, 772 F.2d 1570, 227 USPQ 117 (Fed. Cir. 1985 (“the test for sufficiency of support in an [application] is whether the disclosure of the application relied upon reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter”).

As also argued in the Previous Response, paragraph 0073 of the originally filed specification states that the invention is preferably implemented by software, whereby the base station 204 typically comprises a microprocessor, in which the functions according to the method described are implemented as functional software. One of ordinary skill in the art of telecommunications would readily understand that software may take the form of a computer program, and that a microprocessor includes a computer-readable medium. Thus, one of ordinary skill in the art would also understand that the inventor had possession of the claimed invention at the time the application was filed. Accordingly, claims 39-41 comply with the written description requirement of 35 U.S.C. § 112.

Furthermore, 37 CFR 1.75(d)(1) and MPEP § 608.01(o) require that the terms of the claim find clear support or antecedent basis in the description (see 37 CFR 1.75(d)(1);

see also MPEP § 608.01(o)). Thus, an alleged lack of antecedent basis, by itself, is not sufficient grounds for an objection to the claims, if the claim terms find clear support in the specification. Applicants respectfully submit that one of ordinary skill in the art would easily find clear support in the specification for the term “computer readable medium,” based upon the reasoning described above. Therefore, Applicants respectfully request that this rejection/objection be withdrawn.

Furthermore, since the Final Office Action does not include an objection to the specification, if the Examiner decides to maintain the objection, Applicants respectfully request that a new non-final Office Action be issued specifically detailing the objection to the specification, and addressing Applicant’s arguments.

Claim Rejections Under 35 U.S.C. § 103

The Office Action rejected claims 1, 4-6, and 39 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hiramatsu (U.S. Patent No. 6,701,163) (“Hiramatsu”), in view of Hunton (U.S. Publication No. 2003/0026351) (“Hunton”) and Takada (U.S. Publication No. 2002/0196876) (“Takada”). The Office Action took the position that Hiramatsu discloses all the elements of the claims with the exception of “generating a limited transmissible signal by reducing an error signal filtered using the filter matched to a chip pulse waveform from the transmissible signal,” and “changing the limiting signal so as to be of an opposite sign and reducing from the signal.” The Office Action then

cited Hunton and Takada as allegedly curing the deficiencies of Hiramatsu. Applicants respectfully traverse this rejection.

Hiramatsu describes a base station apparatus which is capable of suppressing a transmission amplitude at the time of a peak without increasing the number of its filter operation circuits and a method for suppressing the base station apparatus' peak power. Specifically, Hiramatsu describes a block diagram showing a base station which includes modulation sections 101, 102, and 103, which respectively modulates transmission signals A, B, and C. The block diagram also includes filters 110 and 111, which respectively take a transmission signal as an input signal and perform a band restriction of the signal. The block diagram further includes an envelope calculation section 113, a correction coefficient calculation section 114, and multiplication sections 115 and 116. The envelope calculation section 113 calculates an amplification of the input transmission signal. The correction coefficient calculation section 114 performs a comparison of largeness between the amplitude of the transmission signal calculated by the envelope calculation section 113 and a permissible amplitude value set. Multiplication sections 115 and 116 respectively multiply a correction coefficient outputted from the correction coefficient calculation section 114 by a filter coefficient set in filter coefficient memory 112. Finally, the block diagram includes subtraction sections 119 and 120 which respectively decrease the amplitude of an input transmission signal by subtracting a correction value calculated by the respective multiplication sections 115 and

116, and delay sections 116 and 118, which respectively delay the filter signal outputted from filters 110 and 11 (see Hiramatsu at col. 4, line 15 – col. 5, line 65).

Hunton describes a system and method for post-filtering signal peak reduction adapted for use in a multi-carrier communication system incorporating a source of multi-carrier communication signal band limited in plural bands corresponding to the plural carriers. In the system of Hunton, two signal streams are input to a signal-peak suppression unit 110. The suppression unit 110 processes the two streams as a signal complex stream S. The signal-peak suppression unit 110 includes two parallel signal paths, a path with a delay 120, and a parallel correction signal path. The parallel correction signal path includes an algorithm processor 140 which calculates a correction vector C, and a switch 150. Switch 150 either selects the correction vector C or a value zero and outputs the selected value to several parallel time delay matched correction filter paths. Each correction filter path includes a gain circuit, and a correction filter 170. The outputs of the correction filter paths are combined at combiner 130 with a time-delayed version of the signal stream S (see Hunton at paragraphs 0022-0024).

Takada describes an interference signal removal system (see Takada at Abstract). The interference signal removal system includes is supplied with an I component and a Q component of a received signal (see Takada at paragraph [0076]). The interference signal removal system includes filters 62a, 62b, 63a, and 63b for carrying out I-phase and Q-phase complex computations (see Takada at paragraph [0083]). An adder 64a sums the

signals output by the adaptive filters 62a and 63b and outputs the result to a subtractor 65a. The adder 64a reverses the sign of the signal output by adaptive filter 63b while carrying out the addition (see Takada at paragraph [0085]). The subtractor 65a receives the undelayed I-component input signal $rI(t)$ and the output signal $FMI(t)$ from the adder 64a, subtracts the output signal $FMI(t)$ from the input signal $rI(t)$, and outputs a subtraction result $eI(t)$ (see Takada at paragraph [0088]).

Applicants respectfully submit that Hiramatsu, Hunton, and Takada, whether considered individually or in combination, fail to disclose, teach, or suggest, all of the elements of the present claims. For example, the hypothetical combination of Hiramatsu, Hunton, and Takada fails to disclose, teach, or suggest, at least, “determining an error signal using the signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 1, and similarly recited in independent claim 39.

Applicants respectfully submit that Hiramatsu fails to disclose the aforementioned limitation because Hiramatsu fails to disclose or suggest using both an original signal and a limiting signal to determine an error signal. The Office Action interprets each of transmission signals A, B, and C, as a “signal”, and each of the outputs from filters 110 and 111 as a “limiting signal.” The Office Action further interprets the calculations performed by envelope calculation section 113 and coefficient calculation section 114 as “determining an error signal using the signal and the limiting signal” (see e.g., Office

Action at page 5). However, Hiramatsu fails to disclose or suggest that either envelope calculation section 113 or coefficient calculation section 114 use transmission signals A, B, and C, in their calculation. Instead, Hiramatsu describes that the envelope calculation section 113 calculates an amplitude of a transmission signal that is a square root of a sum of a square of the in-phase component outputted from the filter 110, and the square of an orthogonal component outputted from the filter 111. Hiramatsu further describes that the calculated amplitude is then output to the correction coefficient calculation section 114. The correction coefficient calculation section 114 performs the comparison of largeness between the amplitude of a transmission signal calculated by the envelope calculation section 113 and the permissible amplitude value set previously. When the amplitude of the transmission signal is beyond the permissible amplitude value, the correction coefficient calculation section 114 calculates a correction coefficient and outputs the calculated correction coefficient to multiplication sections 115 and 116 (see Hiramatsu at col. 5, lines 1-22). Thus, envelope calculation section 113 and coefficient calculation section 114 only use the signals outputted by filters 110 and 111, and fail to use transmission signals A, B, and C, in their calculation. Therefore, Hiramatsu fails to disclose or suggest using both an original signal and a limiting signal to determine an error signal.

Furthermore, neither Takada nor Hunton cure the deficiencies of Hiramatsu. The Office Action took the position that Takada discloses changing a sign of a limiting signal

and subtracting it from an input signal (see Office Action at page 6). Applicants respectfully submit that this position is incorrect. Takada discloses that adder 64a reverses the sign of a signal output by one adaptive filter (i.e., adaptive filter 63b), which the Office Action interprets as a “limiting signal,” adds the reversed sign of the signal output by adaptive filter 63b with the signal output by adaptive filter 62a, and then outputs a result of the summation, $FMI(t)$, to subtractor 65a (see Takada at paragraph [0085]). Takada further describes that subtractor 65a subtracts the output signal $FMI(t)$ from an input signal $RI(t)$ (see Takada at paragraph [0088]). Thus, Takada fails to disclose that the input signal $RI(t)$ is reduced by the reversed sign of the signal output by adaptive filter 63b. Instead, Takada discloses that the input signal $RI(t)$ is reduced by the sum of by the reversed sign of the signal output by adaptive filter 63b and the signal output by adaptive filter 62a.

Hunton describes that a peak reduction calculation circuit calculates a correction value based on an input signal S and a constant L . A switch then selects either the calculated correction value or zero depending on whether the magnitude of input signal S exceeds constant L . The correction signal (which includes either the calculated correction value or zero) is then combined with a time-delayed version of signal S . Hunton fails to disclose or suggest taking the opposite sign of the difference of the signal S and a constant L and using it to reduce signal S . Instead, Hunton merely discloses combining signal S with a calculated correction signal.

Therefore, the hypothetical combination of Hiramatsu, Hunton, and Takada fails to disclose, teach, or suggest, all of the elements of independent claims 1 and 39.

Furthermore, Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art, at the time of the filing of the present application, to combine Hiramatsu, Hunton, and Takada in the manner that the Office Action has combined the references.

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007), the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries are: (a) determining the scope and content of the prior art; (b) ascertaining the differences between the claimed invention and the prior art; and (c) resolving the level of ordinary skill in the pertinent art. *See KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966); *see also* MPEP § 2141.

The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit. The court stated that “rejections on obviousness cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *See KSR*, 550 U.S. at 398, 82 USPQ2d at 1396; *see also* MPEP § 2141.

The Office Action alleged that it would have been obvious to one of ordinary skill in the art to modify the base station structure described in Hiramatsu by replacing the envelope calculation section 113 and coefficient calculation section 114 components of Hiramatsu with the adaptive filters 62a, 62b, 63a, and 63b, and the adders 64a and 64b, of Takada. The Office Action further alleged that it would have been obvious to one of ordinary skill in the art to modify the signal calculation functionality described in Hiramatsu by replacing the calculation of a transmission signal amplitude performed by the envelope calculation section 113, and the calculation of a correction coefficient performed by the coefficient calculation section 114, with the I-phase and Q-phase complex calculations performed by adaptive filters 62a, 62b, 63a, and 63b, and the summation of the output signals performed by adders 64a and 64b. The Office Action indicated that the motivation to make all these modifications would be “to remove interference” (see e.g., Office Action at page 6).

Applicants respectfully submit that the Office Action’s proposed modification of the base station structure of Hiramatsu would render the base station unable to perform its primary purpose, namely, suppressing a transmission amplitude at the time of a peak without increasing a number of its filter operation circuits (see Hiramatsu at col. 3, lines 43-47). This is because Takada fails to disclose or suggest that the adaptive filters and adders could perform the functionality of calculating a transmission signal amplitude and calculating a correction coefficient performed by the envelope calculation section 113

and the coefficient calculation section 114. As described in Hiramatsu, the calculation of a correction coefficient and the subtraction of a correction value obtained by multiplying a correction coefficient by a filter coefficient from a transmission signal allows the base station to suppress a transmission amplitude (see Hiramatsu at col. 3, lines 48-53). Because the Office Action's rationale for modifying the base station structure of Hiramatsu with components described in Takada fails to address how the modification would allow the base station structure to perform its primary purpose, Applicants respectfully submit that the Office Action has failed to establish a prima facie case that the claims would have been obvious to one of ordinary skill in the art, at the time of the filing of the present application.

Furthermore, claims 4-6 depend upon independent claim 1. Thus, Applicants respectfully submit that claims 4-6 should be allowed for at least their dependence upon independent claim 1, and for the specific elements recited therein.

Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office Action rejected claims 2, 12-14, 18, 22-24, 35, and 40 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hiramatsu, in view of Chang (U.S. Patent No. 6,628,605) ("Chang") and Takada. The Office Action took the position that Hiramatsu discloses all the elements of the claims with the exception of "orthogonalizing the error signal," and "changing the limiting signal so as to be of an opposite sign and

reducing from the signal.” The Office Action then cited Chang and Takada as allegedly curing the deficiencies of Hiramatsu. Applicants respectfully traverse this rejection.

Hiramatsu and Takada are described above. Chang describes a method and apparatus for efficiently transmitting multiple data signals. A switch determines the timing signals associated with each data input and then re-times the data based upon timing signals at the switch output. Timing signals are routed through a multiplexer that preferably determines the difference between the timing signal and a reference signal, combines the difference signal with other difference signals calculated for other data inputs, and transmits the multiplexed difference signals to a demultiplexer (see Chang at Abstract).

Applicants respectfully submit that Hiramatsu, Chang, and Takada, whether considered individually or in combination, fail to disclose, teach, or suggest, all of the elements of the present claims. For example, the hypothetical combination of Hiramatsu, Chang, and Takada fails to disclose, teach, or suggest, at least, “determining an error signal using the signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 2, and similarly recited in independent claims 18, 35, and 40.

While each of the claims have their own scope, Applicants respectfully submit that Applicants respectfully submit that the hypothetical combination of Hiramatsu and Takada fails to disclose the aforementioned limitation for similar reasoning as to why the

hypothetical combination of Hiramatsu and Takada fails to disclose “determining an error signal using the signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 1.

Furthermore, Chang does not cure the deficiencies of Hiramatsu and Takada. Rather, Chang merely describes difference signals 420 and 422 is encoded by CDMA encoder 412 and 414 with an orthogonal code, and frequency modulated as a carrier frequency (see Chang at col. 9, lines 1-11).

Therefore, the hypothetical combination of Hiramatsu, Chang, and Takada fails to disclose, teach, or suggest, all of the elements of independent claims 2, 18, 35, and 40. Furthermore, as described above, Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art, at the time of the filing of the present application, to combine Hiramatsu, Chang, and Takada in the manner that the Office Action has combined the references.

Claims 12-14 depend upon independent claim 2. Claims 22-24 depend upon independent claim 35. Thus, Applicants respectfully submit that claims 12-14 and 22-24 should be allowed for at least their dependence upon independent claims 2 and 35, respectively, and for the specific elements recited therein.

Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office Action rejected claims 3, 15-17, and 41 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hiramatsu, in view of Ozluturk et al. (U.S. Publication

No. 2005/0213691) (“Ozluturk”) and Takada. The Office Action took the position that Hiramatsu discloses all the elements of the claims with the exception of “dividing the error signal onto different carriers in a predetermined manner,” and “changing the limiting signal so as to be of an opposite sign and reducing from the signal.” The Office Action then cited Ozluturk and Takada as allegedly curing the deficiencies of Hiramatsu. Applicants respectfully traverse this rejection.

Hiramatsu and Takada are described above. Ozluturk describes a system for balancing a signal having I and Q components. The system includes means for cross-correlating the I and Q components to produce a cross-correlation product. The system also includes means for adjusting the gain of each I and Q signal component in accordance with the cross-correlation product. The system also includes means for adding one component with the adjustable gain of the other component to produce a phase-balanced signal (see Ozluturk at Abstract).

Applicants respectfully submit that Hiramatsu, Ozluturk, and Takada, whether considered individually or in combination, fail to disclose, teach, or suggest, all of the elements of the present claims. For example, the hypothetical combination of Hiramatsu, Ozluturk, and Takada fails to disclose, teach, or suggest, at least, “determining an error signal using the combination signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 3, and similarly recited in independent claim 41.

While each of the claims have their own scope, Applicants respectfully submit that Applicants respectfully submit that the hypothetical combination of Hiramatsu and Takada fails to disclose the aforementioned limitation for similar reasoning as to why the hypothetical combination of Hiramatsu and Takada fails to disclose “determining an error signal using the signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 1.

Furthermore, Ozluturk does not cure the deficiencies of Hiramatsu and Takada. Ozluturk merely describes an amplitude balancing system 17 where two bi-phase modulated signals 19 are input 21I, and 21Q, where I is the real component of the signal and Q is the imaginary component of the signal (see Ozluturk at paragraphs 0008 and 0025).

Therefore, the hypothetical combination of Hiramatsu, Ozluturk, and Takada fails to disclose, teach, or suggest, all of the elements of independent claims 3 and 41. Furthermore, as described above, Applicants respectfully submit that it would not have been obvious to one of ordinary skill in the art, at the time of the filing of the present application, to combine Hiramatsu, Ozluturk, and Takada in the manner that the Office Action has combined the references.

Claims 15-17 depend upon independent claim 3. Thus, Applicants respectfully submit that claims 15-17 should be allowed for at least their dependence upon independent claim 3, and for the specific elements recited therein.

Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office Action rejected claims 7-10 and 25-28 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hiramatsu, Hunton and Takada, in view of McGowan et al. (U.S. Publication No. 2002/0012403) (“McGowan”). The Office Action took the position that the hypothetical combination of Hiramatsu, Hunton, and Takada discloses all the elements of the claims with the exception of “wherein the limiting signal is determined by means of a threshold value set for the power or amplitude values,” “wherein the limiting signal is determined by means of a threshold value set for the power or amplitude values, the threshold value being set bearing in mind the maximum value predetermined for an error vector magnitude and for a peak code domain error,” and “wherein the limiting signal is determined by means of a threshold value set for the power or amplitude values, the threshold value being set so as to obtain the desired Peak-to-Mean Ratio, Peak-to-Average Ratio, Crest factor of the power or amplitude.” The Office Action then cited McGowan as allegedly curing the deficiencies of Hiramatsu, Hunton, and Takada. Applicants respectfully traverse this rejection.

Hiramatsu, Hunton, and Takada are described above. McGowan describes a peak power regulator that functions within a Code Division Multiple Access transmitter to reduce peak power spikes within baseband signals while maintaining the average output power consistent with the average input power, controlling the out-of-band emissions,

and maintaining the in-band signal quality within an acceptable degradation (see McGowan at Abstract).

Claims 7-10 depend upon independent claim 1, and claims 25-28 depend upon independent claim 35. As discussed above, the hypothetical combination of Hiramatsu, Hunton and Takada does not disclose, teach, or suggest all of the elements of independent claims 1 and 35. Furthermore, McGowan does not cure the deficiencies in Hiramatsu, Hunton, and Takada, as McGowan also does not disclose, teach, or suggest, at least, “determining an error signal using the signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 1, and similarly recited in independent claim 35. Thus, the hypothetical combination of Hiramatsu, Hunton, Takada, and McGowan does not disclose, teach, or suggest all of the elements of claims 7-10 and 25-28. Additionally, claims 7-10 and 25-28 should be allowed for at least their dependence upon independent claims 1 and 35, respectively, and for the specific elements recited therein.

Furthermore, it is well established in U.S. patent law that a piecemeal analysis of a large number of references, to extract a number of individual elements which are picked and chosen to recreate the claimed invention, is improper absent some teaching or suggestion in the references to support their use in the particular claimed combination. It is also improper to look to the Applicant’s own disclosure for any such motivation or incentive. *See Interconnect Planning Corporation v. Feil*, 227 USPQ 543 (Fed. Cir.

1985). Thus, the Office Action has failed to establish that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the disclosure of Hiramatsu to incorporate the features of three separate references, namely, Hunton, Takada, and McGowan.

Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Office Action rejected claim 11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hiramatsu, Chang, and Takada, in view of Dartois (U.S. Publication No. 2002/0042253) (“Dartois”). The Office Action took the position that the hypothetical combination of Hiramatsu, Chang, and Takada discloses all the elements of the claims with the exception of “wherein a second clipping state is added.” The Office Action then cited Dartois as allegedly curing the deficiencies of Hiramatsu, Chang, and Takada. Applicants respectfully traverse this rejection.

Hiramatsu, Chang, and Takada are described above. Dartois describes a method for clipping a wideband signal in order to eliminate signal overshoots having an amplitude above a predefined threshold before submitting the wideband signal to a power amplifier (see Dartois at Abstract).

Claim 11 depends upon independent claim 2. As discussed above, the hypothetical combination of Hiramatsu, Chang, and Takada does not disclose, teach, or suggest all of the elements of independent claim 2. Furthermore, Dartois does not cure the deficiencies in Hiramatsu, Chang, and Takada, as Dartois also does not disclose,

teach, or suggest, at least, “determining an error signal using the signal and the limiting signal by changing the limiting signal so as to be of an opposite sign and reducing from the signal,” as recited in independent claim 2. Thus, the hypothetical combination of Hiramatsu, Chang, Takada, and Dartois does not disclose, teach, or suggest all of the elements of claim 11. Additionally, claim 11 should be allowed for at least its dependence upon independent claim 2, and for the specific elements recited therein.

Furthermore, as previously described, it is well established in U.S. patent law that a piecemeal analysis of a large number of references, to extract a number of individual elements which are picked and chosen to recreate the claimed invention, is improper absent some teaching or suggestion in the references to support their use in the particular claimed combination. It is also improper to look to the Applicant’s own disclosure for any such motivation or incentive. *See Feil*, 227 USPQ 543. Thus, the Office Action has failed to establish that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the disclosure of Hiramatsu to incorporate the features of three separate references, namely, Chang, Takada, and Dartois.

Based on the above discussion, Applicants respectfully submit that the cited prior art references fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-41 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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